BRUHATH BANGALORE MAHANAGARA PALIKE

YALAHANKA ELECTRICAL DIVISION

E MEASUREMENT BOOK

Name of work:- Providing, laying and Laying Aerial Bunched Cables/damaged poles/panel boards to Major roads in Byatrayanapura constituency Ward No-6.

BRUHATH BANGALORE MAHANAGARA PALIKE

Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work: :- Providing, laying and Laying Aerial Bunched Cables/damaged poles/panel boards to Major roads in Byatrayanapura constituency Ward No-6. .

Name of Contractror of nature of Agency:- Sri Pradeep Kumar S.N. Pro of M/S. Ganga Enterprises

Job Code No:- 006-20-000168

Ref no and Date of commencement of work:-EE/Ele/YZ/WO/000013/20-21 Date:16/06/2020

Measurement Book No: 2570/19-20. **Page No:** 25/936 to 6940.

Bill NO :-

Sl. No.	Description of item		Unit	Present Measurements		
				Qty	Tender Full Rate	Cost
1	Digging of Pits 1.8 mtr depth for errection of 9 to 10mtr Long Steel/RCC/PSC supports as per approved Drawing.Ordinary Soil		Nos	7	328.00	2296.00
2	Erection of steel supports 9.0 to 10.00 mtr long suchas 22.68 kg (50 lbs) Rail, 27.22 kg (60 Lbs) Rail IBeam of sizes 200x100mm, 175x90 mm, 125x100mm. Fabricates poles tubular poles in pits of 1.8 mtrDepth, Aligning, Refilling with soil and ramming asapproved drawing		Nos	7	304.00	2128.00
3	Pole concreting with CC 1:2:4 (without coping) f) 8mtrs support (400x400x1500mm)		Nos	7	800.00	5600.00
4	Any Dismantling work 90% of the corresponding erection charges(304x90%=273.6)		Nos	7	273.00	1911.00
5	Transportation using 7.5/10 Tons Lorry Rs. 23 per Kms subjected to a minimum of Rs. 1200/-per day (shifting of Panel boards & Poles)		Nos	6	800.00	4800.00
6	Painting of existing street light pole after scrapping the old paint and painted with suitable colour enamel/Silver paint including coping/footing of the pole 8Mtr and above street light pole.		Nos	7	500.00	3500.00
1	New Pole	Opp Vishal medicals Hegade Nagara main road Shivarama karantha Nagara				
2	New Pole	Opp Fashion Trends Hegade Nagara main road Shivarama karantha Nagara				
3	GE/06/TC/HMR/66/S	Opp # 919, P T Provision store Hegade Nagara main road Shivarama karantha Nagara				
4	GE/06/TC/HMR/70/S	Opp # 561, Mini Graphics, Hegade Nagara main road Shivarama karantha Nagara				
5	GE/05/EFR/182/S	Near Railway gate MCECHS L/o, Hegade Nagara main road Shivarama karantha Nagara				
6	GE/05/EFR/179/S	Near Railway gate next pole MCECHS L/o, Hegade Nagara main road Shivarama karantha Nagara				
7	GE/05/EFR/175/S	Near Railway gate 2nd next pole MCECHS L/o, Hegade Nagara main road Shivarama karantha Nagara				
7	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all		Per Mtr	1496	113.00	169048.00
8	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR		Per Mtr	1496	8.00	11968.00
	VE/05/EFR/145/S to VE/05/EFR/146/S	30 Mtrs				
	VE/05/EFR/146/S to VE/05/EFR/147/S	30 Mtrs				

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	VE/05/EFR/147/S to VE/05/EFR/148/S	30 Mtrs				
	Doosan Machine tools India PVT Ltd To MCECHS L/o 2nd Phase panel board					
1	VE/05/EFR/149/S to VE/05/EFR/150/S	30 Mtrs				
2	VE/05/EFR/150/S to VE/05/EFR/151/S	30 Mtrs				
3	VE/05/EFR/151/S to VE/05/EFR/152/S	30 Mtrs				
4	VE/05/EFR/152/S to VE/05/EFR/153/S	30 Mtrs				
5	VE/05/EFR/153/S to VE/05/EFR/154/S	30 Mtrs				
6	VE/05/EFR/154/S to VE/05/EFR/155/S	30 Mtrs				
7	VE/05/EFR/155/S to VE/05/EFR/156/S	30 Mtrs				
8	VE/05/EFR/156/S to VE/05/EFR/157/S	30 Mtrs				
9	VE/05/EFR/157/S to VE/05/EFR/158/S	30 Mtrs				
10	VE/05/EFR/158/S to VE/05/EFR/159/S	30 Mtrs				
11	VE/05/EFR/159/S to VE/05/EFR/160/S	30 Mtrs				
12	VE/05/EFR/160/S to VE/05/EFR/161/S	30 Mtrs				
13	VE/05/EFR/161/S to VE/05/EFR/162/S	30 Mtrs				
14	VE/05/EFR/162/S to VE/05/EFR/163/S	30 Mtrs				
15	Panel board TO RCC Pole main connection	120 Mtrs				
	Telecom L/o TO Burrial ground Jakkur					
16	VE/05/EFR/68/S to VE/05/EFR/69/S	30 Mtrs				
17	VE/05/EFR/69/S to VE/05/EFR/70/S	30 Mtrs				
18	VE/05/EFR/70/S to VE/05/EFR/71/S	30 Mtrs				
19	VE/05/EFR/71/S to VE/05/EFR/72/S	30 Mtrs				
20	VE/05/EFR/72/S to VE/05/EFR/73/S	30 Mtrs				
21	VE/05/EFR/73/S to VE/05/EFR/74/S	30 Mtrs				
22	VE/05/EFR/74/S to VE/05/EFR/75/S	30 Mtrs				
23	VE/05/EFR/75/S to VE/05/EFR/76/S	30 Mtrs				
24	VE/05/EFR/76/S to VE/05/EFR/77/S	30 Mtrs				
25	VE/05/EFR/77/S to VE/05/EFR/78/S	30 Mtrs				
26	VE/05/EFR/78/S to VE/05/EFR/79/S	30 Mtrs				
27	VE/05/EFR/79/S to VE/05/EFR/80/S	30 Mtrs				
28	VE/05/EFR/80/S to VE/05/EFR/81/S	30 Mtrs				
29	VE/05/EFR/81/S to VE/05/EFR/82/S	30 Mtrs				
30	VE/05/EFR/82/S to VE/05/EFR/83/S	30 Mtrs				
31	VE/05/EFR/83/S to VE/05/EFR/84/S	30 Mtrs				
32	VE/05/EFR/84/S to VE/05/EFR/85/S	30 Mtrs				
33	VE/05/EFR/85/S to VE/05/EFR/86/S	30 Mtrs				
34	VE/05/EFR/86/S to VE/05/EFR/87/S	30 Mtrs				
35	VE/05/EFR/87/S to VE/05/EFR/88/S	30 Mtrs				
36	VE/05/EFR/88/S to VE/05/EFR/89/S	30 Mtrs				

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7	VE/05/EFR/89/S to VE/05/EFR/90/S	30 Mtrs				
8	VE/05/EFR/90/S to VE/05/EFR/91/S	30 Mtrs				
9	VE/05/EFR/91/S to VE/05/EFR/92/S	30 Mtrs				
0	VE/05/EFR/92/S to VE/05/EFR/93/S	30 Mtrs				
1	VE/05/EFR/93/S to VE/05/EFR/94/S	30 Mtrs				
2	VE/05/EFR/94/S to VE/05/EFR/95/S	30 Mtrs				
3	VE/05/EFR/95/S to VE/05/EFR/96/S	30 Mtrs				
4	VE/05/EFR/96/S to VE/05/EFR/97/S	30 Mtrs				
5	VE/05/EFR/97/S to VE/05/EFR/98/S	30 Mtrs				
6	VE/05/EFR/98/S to VE/05/EFR/99/S	30 Mtrs				
7	VE/05/EFR/99/S to VE/05/EFR/100/S	30 Mtrs				
	Total 1500 Mtrs					
9	Piercing connector suitable for 16 sqmm - 95 sqmm AB cable -steel light connection. Bescom SR of 2010-11, Page no 16 of 34, Serial no 51.12.		Each	5	27.00	135.00
0	Suspension clamp assembly 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page no 16 of 34, Sl no 51.17.		Each	5	180.00	900.00
1	Dead end clamp / Anchor clamp assembly 25 to 95 sqmm bare messenger, Bescom SR of 2010-11, Page no 16 o 34, Sl no 51.16.		Each	1	140.00	140.00
2	Universal Hook and Bolts and Nuts, Bescom SR of 2010-11, Page no 16 of 34, Sl no. 51.15.		Each	2	180.00	360.00
3	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page No 21 of 27, Sl No 26.6.		Each	5	45.00	225.00
4	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc., Group A, PWD Elec SR 2006-07.		Each	4	2200.00	8800.00
5	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete.		Each	4	3850.00	15400.00
6	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc.,		Each	7	5800.00	40600.00
1	VE/05/JMR/HM/10/MH (YHSL-591)	Jakkur Circle (High Mast)				
2	VE/05/TC-125/SP/MH10/MH (8ESTL-614)	Srirampura village				
3	VE/05/AL/00/TC/HM/12/MH (YHSL-670)	Agrahara L/o Govt school compound				
4	VE/05/KL/BR/TC/HM/12/S	Kogilu L/o Bonddy road Ittige factory				
	No Pole No	Byatrayanapura Vegetable Market				
6	BB road Gandhinagar Yelahanka Old double road Tubular Pole (YHSL-598)					
7	BB road Gandhinagar Yelahanka Old double road Tubular Pole (YHSL-599) Ward No 02					
7	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40 Amps SP27/5.17.2		Each	12	513.00	6156.00
8	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.4 core 16 sqmm40/6.4.4		Mtrs	97	110.00	10670.00
9	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct. 6 sqmm to 16 sqmm		Mtrs	97	15.00	1455.00
	E) UG Cable 25X4 Ganesha Park M.S.Palya					
1	Panel board TO RCC Pole Mains	73 Mtrs				

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2	Ganesha park M.S.Palya pathway light pole TO Panel board (16X4)	24 Mtrs				
20	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete.41/6.6.1		Mtrs	75	46.00	3450.0
21	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG KPWD ELE SR Page-30/5.42.2		sq.cms	99650	0.25	24912
	65x65Cmsx3 Sides =12675Sqcms 22.5x65 Cmsx3 Sides= 4387.00Sqcms 710x32.5 Cmsx2 Sides=4550 Sqcms Total 21612 Sqcms x5 Nos=108060 Sqcms					
22	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. KPWD ELE SR Page-24/5.7.3 100Amps		Each	18	127.00	2286.0
23	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or consealed system of wiring.I Group A Materials.6 sqmm 6/2.3.3		Mtrs	198	35.00	6930.0
24	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5)Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure. 7) transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.		No	1	35200	35200
	1) Rachenahalli village High mast					
	Total Rs					**358870**
	Add GST Item No 15 to 23 Rs 111859.5 @ 12%					13423
	Total Rs					**372293**

CERTIFICATE:

1. This is certify that the work done is saticefactorily.
2. This is certify that the bill amount calimed in this bill does not claimed in any of the previous bill.

Junior Engineer(Elec)
Yalahanka Division

Asst.Exe.Engineer(Elec)
Yalahanka Division

Executive Engineer
Electrical Division
Yelahanka Zone BBMP
Byatarayanapura, Bangalore-92